



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/369,386	08/06/1999	MOTOTAKA TANEYA	914-101	6727

7590

08/06/2002

NIXON & VANDERHYE PC  
1100 NORTH GLEBE ROAD 8TH FLR  
ARLINGTON, VA 222014714

EXAMINER

PIZIALI, JEFFREY J

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 08/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/369,386

Applicant(s)

TANEYA ET AL.

Examiner

Jeff Piziali

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rebeschi et al. (US 5,781,167) in view of Yamada et al. (US 5,990,629).

Regarding claim 1, Rebeschi discloses an EL emission device [Fig. 2; 200] including first [Fig. 2; 216] and second [Fig. 2; 212] electrode layers, at least one of which is transparent; a light emission layer [Fig. 2; 214] for EL emission sandwiched between the first and second electrode layers for together supplying electric fields to the light emission layer, wherein at least the first electrode layer includes a plurality of electrodes arranged with spatial periodicity, and the plurality of electrodes included in the first electrode layer together with adjacent regions in the second electrode layer including at least one electrode form a plurality of electrode pair regions arranged with spatial periodicity (see Column 3, Lines 40-64), a method comprising driving the EL emission device in a manner such that the prescribed electric fields are substantially always different from each other in at least either strength or polarity as applied with variation in a time-dependent manner to electrode pair regions adjacent to each other among the plurality of electrode pair regions (see Figs. 6A-6F; Column 4, Line 17 - Column 5, Line 3). Rebeschi does not expressly disclose an organic light emission layer.

However, Yamada does disclose utilizing organic light emission material for electroluminescent elements (see Claims 1 & 10; Column 42, Lines 35-41 & Column 43, Lines 27-29). Rebeschì and Yamada are analogous art because they are from the shared field of EL display devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Yamada's organic light emission material as Rebeschì's light emission layer, so as to make use of whatever type of EL material might be available.

Regarding claim 2, Rebeschì discloses the electric fields with at least different strengths or polarity to be applied to electrode pair regions adjacent to each other among the plurality of electrode pair regions are varied with a constant time periodicity (see Figs. 6A-6F; Column 4, Line 17 - Column 5, Line 3).

Regarding claim 3, Rebeschì discloses alternating voltages with opposite polarities are applied to electrode pair regions adjacent to each other among the plurality of electrode pair regions (see Figs. 6A-6B; Column 4, Lines 43-50).

Regarding claim 4, Rebeschì discloses at least the first electrode layer includes a plurality of electrodes in one of a dot-like form and a stripe-like form (see Fig. 2; 216).

Regarding claim 5, Rebeschì discloses the second electrode layer includes a plurality of stripe-like electrodes [Fig. 2; 212] positioned in parallel to the plurality of stripe-like electrodes [Fig. 2; 216] included in the first electrode layer.

Regarding claim 6, Rebeschi discloses the second electrode layer includes a plurality of stripe-like electrodes [Fig. 3, 322 & 342] arranged to intersect the plurality of stripe-like electrodes [Fig. 3, 312 & 332] included in the first electrode layer (see Column 3, Line 65 - Column 4, Line 15).

Regarding claim 7, Rebeschi discloses a first group of electrodes [Fig. 3; 312] including every other electrode are electrically connected to each other, and a second group of electrodes [Fig. 3; 332] that remain beside the first group of electrodes are electrically connected to each other in the first electrode layer (see Column 3, Line 65 - Column 4, Line 15).

Regarding claims 8 and 9, Rebeschi discloses a first group of electrodes [Fig. 3; 322] including every other electrode are electrically connected to each other, and a second group of electrodes [Fig. 3; 342] that remain beside the first group of electrodes are electrically connected to each other in the second electrode layer (see Column 3, Line 65 - Column 4, Line 15).

Regarding claim 10, this claim is rejected under the reasoning applied in the above rejection of claim 1, furthermore, Rebeschi discloses a voltage application means [Fig. 2; 217] for applying a voltage between an electrode included in the first electrode layer and an electrode included in the second electrode layer (see Column 3, Lines 56-64).

Art Unit: 2673

Regarding claim 12, this claim is rejected under the reasoning applied in the above rejection of claim 1, furthermore, Rebeschi discloses allowing half or less than half of the total number of electrode pair regions to emit light at a time (see Figs. 6A-6B; Column 4, Line 17 - Column 5, Line 3).

Regarding claim 13, Rebeschi discloses the prescribed electric fields are substantially always different from each other in at least either strength or polarity for all adjacent electrode pair regions in the EL emission device (see Figs. 6A-6B; Column 4, Line 17 - Column 5, Line 3).

Regarding claim 14, this claim is rejected under the reasoning applied in the above rejection of claims 1 and 3, furthermore, Rebeschi discloses driving the organic EL emission device in a manner such that the prescribed electric fields at a given point in time are substantially always different from each other in polarity as applied to electrode pair regions adjacent to each other (see Figs. 6A-6B; Column 4, Lines 43-50).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the

Art Unit: 2673

claimed invention. The claim's subject matter of "the prescribed electric fields [being] substantially always different from each other in at least either strength or polarity for all adjacent electrode pair regions in the EL emission device" is not found in the present specification.

### ***Response to Arguments***

5. Applicants' arguments filed May 28, 2002 have been fully considered but they are not persuasive. The applicants contend the functionality and operation of Rebeschi's EL emission device [Fig. 2; 200] would be destroyed if Yamada's organic EL material were substituted in the place of Rebeschi's inorganic EL material [Fig. 2; 214]. The examiner respectfully disagrees. Rebeschi discloses one type of EL material "typically" for use with the display (see Column 3, Lines 54-55). In no way does Rebeschi teach or suggest that other EL material types would be incompatible with the device. Furthermore, Yamada explicitly discloses substituting organic and inorganic EL materials for one another in a display device (see Column 41, Lines 44-49). The applicants argue Rebeschi's disclosed voltage values would destroy the organic EL material; but Rebeschi clearly states, "the write voltage and modulation voltages are application specific and are intended to vary across a wide range of voltages depending on the type of TFEL display contemplated" (see Column 4, Lines 17-39). The applicants also contend Rebeschi's insulating layers [Fig. 2, 213 & 215] would block the flow of EL-material level DC current. Again, however, the applicants' contention is at odds with Rebeschi's disclosed operational voltage ranges (see Column 4, Lines 17-39). By such reasoning, rejection of the claims is deemed proper, and thereby maintained.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Art Unit: 2673

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



J.P.

July 31, 2002



BIPIN SHALWALA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600